

5 **ABSTRACT OF THE DISCLOSURE**

10 A linear motor includes an improved heat dissipation mechanism, which has the function of increasing the area of heat dissipation from coils of the linear motor. reducing the weight of the rotor, and simplifying the heat dissipation mechanism. The coils of the present invention have open centers which serve as heat dissipation holes. A heat sink compound is smeared around the heat holes to increase the area of heat dissipation, and reduce the weight of the rotor such that the thrust and operating life of the motor is increased. Furthermore, the present invention also can include a heat dissipation mechanism (such as a heat pipe or an air blowing pipe) set into the heat holes near the heat source to raise heat dissipation efficiency.